



# NORDIC ID HH83

## THE FUTUREPROOF AND DURABLE CHOICE FOR DATA COLLECTION

Nordic ID HH83 is designed for **quick, accurate and reliable** data collection whether it is for barcode or UHF RFID reading. When the decision has to be made, choose the new generation of reader that is **timeless and futureproof**. There are many things to consider and so many choices. If only you had a crystal ball to see what the future will bring.

It's a good thing you selected the Nordic ID HH83. The **ergonomic** design is easy to hold so the staff does not complain. You know that the **modular** design will work with your barcode and RFID locations, just **upgrade** instead of replacing the device. The finance guys will appreciate that!

IT wants software that complies with the company rules and the **Android 9** fits perfectly.

Anybody else have needs? Well the warehouse needs durability. The **IP65** rating and drop tested design will take care of that.

Who needs a crystal ball?

### PRODUCT VARIANTS

NORDIC ID HH83  
RFID ACD



NORDIC ID HH83  
BARCODE



UHF RFID



WLAN



LTE



2D Imager  
Barcode



Bluetooth



GNSS



Android  
9

## PRODUCT HIGHLIGHTS

- Market leading state-of-the-art UHF RFID performance
- Future proof your data collection with this powerful industrial level RAIN RFID performance
- Protect your investment thanks to our easily upgradeable modular design: transform barcode to RFID whenever you are ready
- Ergonomic design focused on comfortable use
- Operates a full working day on a single charge
- Android operating system for easy application development
- Fully integrated to Nordic ID solutions

# NORDIC ID HH83

## UHF RFID IDENTIFICATION

Supported standard	ISO 18000-63 (EPC Class 1 Gen2)
Frequency	ETSI 865.6–867.6 MHz or FCC/IC 902–928 MHz
RF radiated power	ERP 2 W / EIRP 3.3 W
Antenna features	<ul style="list-style-type: none"> <li>Software controllable antenna polarizations (vertical/horizontal)</li> <li>Reading range up to 15 m / 50 ft</li> </ul>
Max receive sensitivity	-80 dBm
Typical reading speed	Up to 1000 tags per second

## BARCODE IDENTIFICATION AND IMAGING

2D imager	<ul style="list-style-type: none"> <li>All major 1D barcodes and 2D codes</li> <li>High visibility LED aimer</li> <li>2 characters pre and post fixes, padding, replacement</li> <li>Enhanced aiming mode (automatic switching between scan line / aiming dot)</li> <li>Configurable scan alert sounds</li> </ul>
Camera	5 Mpix rear-facing camera with auto focus and LED flash (torch mode supported)

## PLATFORM

RFID	Nordic ID NUR2-1W reader module
CPU	Octa-Core ARM Cortex-A53 1.8 GHz
Operating system	Android 9
Memory	<ul style="list-style-type: none"> <li>2 GB RAM</li> <li>16 GB Flash</li> <li>MicroSD slot with support for SDHC cards</li> </ul>
Sensors	Accelerometer, ambient light sensor, Time of Flight sensor (only in barcode variant), proximity sensor, pedometer, gyroscope

## USER INTERFACE

Display	<ul style="list-style-type: none"> <li>4.7 HD capacitive touch screen, 1280 x 720 pixels, 16.7 M colors</li> <li>Adjustable LED backlight, Daylight readable, Gorilla glass 3, usage with gloves supported</li> </ul>
Keypad	3 backlit physical keys below the display, 2 customizable trigger buttons on the sides
Audio	Microphone, earpiece and IHF speaker
Signals and indicators	RGB LED and vibra for haptic feedback

## ENVIRONMENT

Temperature	Operating	-20° to +55 °C	-4 to +131 °F
	Storage	-20° to +60 °C	-4 to +140 °F
	Charging	0° to +45 °C	+32 to +113 °F
Relative humidity	10 % to 95 % non-condensing		
Environmental sealing	IP65		

## CONNECTIVITY

Wireless WAN (optional)	<b>Europe</b> <ul style="list-style-type: none"> <li>4G LTE (B1/B3/B5/B7/B8/B20/B28A/B38/B40/B41)</li> <li>3G WCDMA (B1/B2/B5/B8)</li> <li>GPRS / EDGE (850/900/1800/1900)</li> </ul>
GNSS (optional)	Assisted GPS, BeiDou, GLONASS and Galileo
Wireless LAN	IEEE 802.11 a/b/g/n/ac. Dual band WLAN, supports 2.4 GHz and 5 GHz networks
Wireless PAN	<ul style="list-style-type: none"> <li>Bluetooth 4.2 Class 2</li> <li>Classic and Low Energy modes supported</li> </ul>
PAN	<ul style="list-style-type: none"> <li>USB 2.0 via USB Type-C connector</li> <li>Desktop charger provides USB connectivity via USB Type-C connector</li> </ul>
NFC	NFC standards supported: ISO/IEC 14443A, ISO/IEC 14443B, FeliCa, ISO/IEC 15693 (Vicinity)

## POWER

Battery	<ul style="list-style-type: none"> <li>Rechargeable, removable Lithium-Ion battery: 6700 mAh, 3.6 V or 3350 mAh, 3.6 V</li> <li>Up to 12 hours in intensive use</li> </ul>
Charging	<ul style="list-style-type: none"> <li>Charging over desktop charger (0 to 100 %) 4 h</li> <li>Charging over USB Type-C connector (0 to 100 %) 4 h (with charger supporting Qualcomm Quick Charge 3.0)</li> </ul>
External power supply	<ul style="list-style-type: none"> <li>AC adapter for desktop charger: input 100-240 VAC, 1A, 50-60 Hz / output 24 VDC, 1.25A, 30 W / Power cable for EU, UK or US</li> <li>AC adapter for multiunit desktop charger: input 100-240 VAC, 1A, 50-60 Hz / output 24 VDC, 6.25A / 150W / Power cable for EU, UK or US</li> </ul>
Backup battery	Back-up battery for real-time clock: keeps time for 200 days
Battery Hot Swap	Supported

## SIZE AND WEIGHT

Dimensions	<ul style="list-style-type: none"> <li>Nordic ID HH83 RFID ACD</li> </ul>	<ul style="list-style-type: none"> <li>(H) 212 x (W) 83/72 x (D) 133/29 mm / (H) 8.3 x (W) 3.3/2.8 x (D) 5.2/1.1 inch</li> </ul>
	<ul style="list-style-type: none"> <li>Nordic ID HH83 BARCODE</li> </ul>	<ul style="list-style-type: none"> <li>(H) 177 x (W) 78/72 x (D) 35/29 mm / (H) 7.0 x (W) 3.1/2.8 x (D) 1.4/1.1 inch</li> </ul>
Weight	<ul style="list-style-type: none"> <li>Nordic ID HH83 RFID ACD</li> </ul>	<ul style="list-style-type: none"> <li>With 6700 mAh battery: 515 g / 18.17 oz</li> </ul>
	<ul style="list-style-type: none"> <li>Nordic ID HH83 BARCODE</li> </ul>	<ul style="list-style-type: none"> <li>With 3350 mAh battery: 340 g / 11.99 oz</li> <li>With 6700 mAh battery: 380 g / 13.40 oz</li> </ul>

## DROP AND SHOCK

Drop and impact resistance	1.6 m / 5.2 ft
ESD	Contacts +/- 4 kVdc Air discharge +/- 8 kVdc



## SUPPORT

- Maintenance service and extended maintenance contract
- Software customization and development support
- Technology, product and integration training
- Technology and project consultation
- Project management services

## WARRANTY

- 2 year warranty
- Free technical support during and after 2 year warranty

## SOFTWARE DEVELOPMENT ENVIRONMENT

- Android Studio, Visual Studio
- Source code available at: <https://github.com/NordicID>